CREEP AND VISCOUS FLOW RESISTANT FIBER OPTIC SENSOR

ABSTRACT OF THE DISCLOSURE

Viscous flow and volume consolidation which may cause sensor output drift are avoided in a fiber optic sensor by using a body of crystalline and preferably monocrystalline material to establish the transducer gap. Use of a monocrystalline material also reduces chemical reactivity of the sensor with substances which may be present where the sensor is deployed. The increased dimensional stability of the monocrystalline body in a tube-based, V-groove-based or other type of fiber optic sensor reduces the need for and frequency of recalibration.